## AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions, and listings, of claims:

1. (Cancelled)

2. (Currently Amended) The method of claim [[1]] 26, wherein receiving the call request comprises receiving an off-hook indication and a dialed number.

3. (Original) The method of claim 2, wherein receiving the call request comprises receiving a network address of the first terminal.

4. (Original) The method of claim 3, further comprising determining the logical identifier based on the network address.

5. (Original) The method of claim 2, wherein the network address comprises an Internet Protocol address.

6. (Currently Amended) The method of claim [[1]] 26, wherein the logical identifier comprises a virtual terminal number.

7. (Currently Amended) The method of claim [[1]] 25, further comprising accessing the information in response to the call request to perform a predetermined action.

8. (Original) The method of claim 7, wherein receiving the call request comprises receiving an indication of activation of a button on the first terminal.

9. (Currently Amended) The method of claim 8, wherein accessing the information comprises accessing a telephone number to dial ~~the information to determine an action to perform~~ in response to the activation of a speed dial ~~the~~ button.

10. (Currently Amended) The method of claim [[1]] 26, wherein storing the information comprises storing the information in a profile associated with the logical identifier.

11. (Original) The method of claim 10, further comprising storing other profiles of other terminals associated with other logical identifiers.

12. (Currently Amended) The method of claim [[1]] 26, wherein storing the information comprises storing configuration information relating to one or more buttons of the first terminal.

13. (Currently Amended) The method of claim [[1]] 26, further comprising the second switch sending a second media connection request to the second terminal, the second media connection request containing a network address of the first terminal to enable the second terminal to ~~establish~~ communicate over a media path with the first terminal over the packet-based network

14. (Currently Amended) A switch system for establishing calls over a packet-based network, comprising:

an interface adapted to communicate over the packet-based network;

a controller communicatively coupled to the interface and adapted to receive a call request over the packet-based network from a first terminal, the first terminal associated with a logical identifier, the call request targeting a second terminal that is coupled to a second switch system,

the controller adapted to further send signaling to the second switch system over a packet-based trunk provided over the packet-based network; and

a storage unit containing information relating to features of the first terminal, the information associated with the logical identifier of the first terminal, the information including a telephone number for a speed-dial button of the first terminal.

15. (Currently Amended) The system of claim [[14]] 28, wherein the logical identifier comprises a virtual terminal number.

16. (Original) The system of claim 15, wherein the storage unit further comprises a table mapping the virtual terminal number to a network address.

17. (Original) The system of claim 16, wherein the network address comprises an Internet Protocol address.

18. (Original) The system of claim 16, wherein the table comprises plural virtual terminal numbers mapped to corresponding plural network addresses.

19. (Currently Amended) The system of claim [[14]] 28, wherein the storage unit contains a profile associated with the logical identifier of the first terminal, the profile containing the information relating to features.

20. (Original) The system of claim 19, wherein the storage unit contains at least another profile associated with at least another logical identifier of another terminal.

21. (Currently Amended) The system of claim [[14]] 28, wherein the signaling between the switch systems comprise signaling to determine if the second terminal is a network terminal capable of communicating over the packet-based terminal.

22. – 24. (Cancelled)

25. (Currently Amended) ~~The method of claim 1~~ A method of establishing a call session over a packet-based network, comprising:

receiving, in a first switch, a call request over the packet-based network from a first terminal associated with a logical identifier, the call request targeting a second terminal coupled to a second switch;

storing, in the first switch, information relating to features of the first terminal, the information associated with the logical identifier;

sending, from the first switch, a request over a packet-based trunk to the second switch in response to the call request; and

sending, from the first switch to the first terminal, a media connection request containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network,

wherein storing, in the first switch, information relating to features of the first terminal comprises storing information relating to a speed dial feature of the first terminal that is coupled to the first switch over a packet-based network.

26. (Currently Amended) ~~The method of claim 1, further comprising~~ A method of establishing a call session over a packet-based network, comprising:

receiving, in a first switch, a call request over the packet-based network from a first terminal associated with a logical identifier, the call request targeting a second terminal coupled to a second switch;

storing, in the first switch, information relating to features of the first terminal, the information associated with the logical identifier;

sending, from the first switch, a request over a packet-based trunk to the second switch in response to the call request;

sending, from the first switch to the first terminal, a media connection request containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network; and

the first switch interacting with the first terminal to establish a call session based on the call request,

wherein the media connection request from the first switch enables the first terminal to ~~establish~~ communicate over the media path of the call session with the second terminal without passing through the first and second switches.

27. (Cancelled)

28. (Currently Amended) ~~The system of claim 27~~ A switch system for establishing calls over a packet-based network, comprising:

an interface adapted to communicate over the packet-based network;

a controller communicatively coupled to the interface and adapted to receive a call request over the packet-based network from a first terminal, the first terminal associated with a logical identifier, the call request targeting a second terminal that is coupled to a second switch system,

the controller adapted to further send signaling to the second switch system over a packet-based trunk provided over the packet-based network; and

a storage unit containing information relating to features of the first terminal, the information associated with the logical identifier of the first terminal,

wherein the controller is adapted to send a media connection request to the first terminal, the media connection request containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network,

wherein the controller is adapted to interact with the first terminal to establish a call session based on the call request and the media connection request enables the first terminal to ~~establish~~ communicate over the media path of the call session with the second terminal without passing though the first and second switches.

29. (Cancelled)

30. (Currently Amended) ~~The article of claim 29, wherein the instructions when executed cause the first switch to further:~~ An article comprising at least one storage medium containing instructions that when executed cause a first switch to:

receive a request over a packet-based network from a first terminal, the terminal associated with a logical identifier;

access a profile associated with the logical identifier;

use information in the profile to send signaling to a second switch to establish a call session with a second terminal;

send a media connection request to the first terminal, the media connection request containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network; and

interact with the first terminal to establish the call session based on the received request,

wherein the media connection request enables the first terminal to ~~establish~~ communicate over the media path of the call session with the second terminal without passing through the first and second switches.

31. (Currently Amended) ~~The article of claim 22,~~ An article comprising at least one storage medium containing instructions that when executed cause a first switch to:

receive a request over a packet-based network from a first terminal, the terminal associated with a logical identifier;

access a profile associated with the logical identifier; and

use information in the profile to send signaling to a second switch to establish a call session with a second terminal,

wherein accessing the profile comprises accessing a profile containing information relating to a speed dial feature of the first terminal.

32. (Currently Amended) ~~The data signal of claim 23, wherein the instructions when executed cause the first switch to~~ A data signal embodied in a carrier wave and comprising instructions that when executed cause a first switch to:

receive a call request over the packet-based network from a first terminal associated with a logical identifier, the call request targeting a second terminal coupled to a second switch;

store information relating to features of the first terminal, the information associated with the logical identifier;

send a request over a packet-based trunk to the second switch in response to the call request;

send a media connection request to the first terminal containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network; and

interact with the first terminal to establish a call session based on the call request, and

wherein the media connection request enables the first terminal to ~~establish~~ communicate over the media path of the call session with the second terminal without passing through the first and second switches.

33. (Currently Amended) ~~The data signal of claim 23~~ A data signal embodied in a carrier wave and comprising instructions that when executed cause a first switch to:

receive a call request over the packet-based network from a first terminal associated with a logical identifier, the call request targeting a second terminal coupled to a second switch;

store information relating to features of the first terminal, the information associated with the logical identifier;

send a request over a packet-based trunk to the second switch in response to the call request; and

send a media connection request to the first terminal containing a network address of the second terminal to enable the first terminal to establish a media path with the second terminal over the packet-based network,

wherein storing the information relating to features of the first terminal comprises storing information relating to a speed dial feature of the first terminal that is coupled to the first switch over the packet-based network.

34. (New) The method of claim 26, further comprising:

receiving, in the first switch, a second call request over a circuit-switched link from a third terminal;

establishing, by the first switch, a second call session involving the third terminal over the packet-based network in response to the second call request; and

converting, by a telephony gateway in the first switch, between voice traffic in circuit-switched formant and voice traffic in packet format in the second call session.

35. (New) The method of claim 34, wherein the receiving acts, storing act, sending acts and establishing act are performed by a call server in the first switch.

36. (New) The switch system of claim 28, wherein the controller is adapted to:

receive a second call request over a circuit-switched link from a third terminal;

establish a second call session involving the third terminal over the packet-based network in response to the second call request; and

the switch system further comprising a telephony gateway to convert between voice traffic in circuit-switched format and voice traffic in packet format in the second call session.